

**THE UNIVERSITY OF ALABAMA AT BIRMINGHAM
SCHOOL OF MEDICINE
FACULTY CURRICULUM VITAE**

Date: April 1, 2003

PERSONAL INFORMATION:

Name: Dennis Wayne Boulware, MD



RANK/TITLE

Professor
Senior Associate Dean for Medical Education

Business Address:

1670 University Boulevard
Volker Hall - L205
The University of Alabama at Birmingham
Birmingham, AL 35294-0019

Phone:

HOSPITAL AND OTHER NON ACADEMIC APPOINTMENTS:

University of Alabama Hospitals
Birmingham Veterans Affairs Medical Center

PROFESSIONAL CONSULTANTSHIPS:

Consultant, Gastroenterology and Urology Devices Panel, Center for Devices and Radiological Health, Food and Drug Administration, 1991-present

EDUCATION:

Institution	Degree	Year
Oregon State University, Corvallis, Oregon	BS (with high honors)	1974
John A. Burns School of Medicine	MD	1978
University of Hawaii, Honolulu, Hawaii		

LICENSURE:

Louisiana 1978 to present _____
 Washington 1980 to 2000 _____
 Alabama 1992 to present _____
 Hawaii 2000 to present _____

BOARD CERTIFICATION:

National Board of Medical Examiners, Diplomat, 1979
 Federal Licensing Examination (FLEX), 1978
 American Board of Internal Medicine, Diplomat, 1981
 American Board of Internal Medicine, Subspecialty of Rheumatology, Diplomat, 1984

POSTDOCTORAL TRAINING:

Year	Degree	Institution
1978-1981	Internship and Residency Internal Medicine Integrated Program	Tulane University Medical Center New Orleans, Louisiana
1981-1983	Fellowship	University of Washington, Seattle, WA

ACADEMIC APPOINTMENTS:

Year	Rank/Title	Institution
2002- pres.	Senior Associate Dean - Education	University of Alabama at Birmingham
1999-2002	Associate Dean - Education (UME & GME)	University of Alabama at Birmingham
1995-1999	Associate Dean - Undergraduate Medical Education	University of Alabama at Birmingham
1993-1999	Assistant Director, Medicine Residency Program	University of Alabama at Birmingham
1992-1999	Director of Professional Education and Postgraduate Training Program, Division of Clinical Immunology and Rheumatology	University of Alabama at Birmingham
1992-pres	Professor of Medicine	University of Alabama at Birmingham
1992	Professor of Medicine	Tulane University
1987-92	Associate Professor of Medicine	Tulane University
1986-92	Chief, Section of Rheumatology	Tulane University
1983-87	Assistant Professor of Medicine	Tulane University

AWARDS/HONORS:

- | | |
|----------------------|--|
| Phi Kappa Phi | - National Honor Society |
| Phi Eta Sigma | - National Freshman Honor Society |
| Phi Sigma | - National Biological Research Honor Society |
| Musser-Burch Society | - Department of Medicine Society for Clinical Excellence, Tulane University |
| Alpha Omega Alpha | - National Medical Honor Society |
| Teaching Awards | - Tulane University School of Medicine Student Owl Club Award for Outstanding Performance 1983-1984, 1987-1988, 1991-1992 |
| | - Special Award for Physical Diagnosis Course 1988-1989, Outstanding Department Award for Dean's Program in Physical Diagnosis, 1989-1990, Special Award for Introduction to Clinical Medicine 1990-1991 |
| | - C. Thorpe Ray Award from the Tulane University Medicine Residency Program, 1989 |
| | - Virginia Furrow Medical Education Award. Tulane University School of Medicine Dean's Award 1990-1991 |
| | - Department of Medicine Teaching Recognition, University of Alabama at Birmingham, 1994-1995, 1997-1998, 1998-1999, 1999-2000 |
| | - Excellence in Medical Education and Outstanding Mentor, Argus Society, University of Alabama School of Medicine, 1995-1996, 1998-1999 |
| | - Harvard Macy Fellowship, Harvard Medical School, 1995-1996 |

PROFESSIONAL SOCIETIES:

American College of Physicians
American College of Rheumatology (formerly American Rheumatism Association)
Alabama Society for Rheumatic Diseases
Association of Subspecialty Professors

COUNCILS AND COMMITTEES:

Local Contribution:

Member, Medical Education Committee, 1992-present
Member, Introduction to Clinical Medicine Task Force, 1992-1995
Co-Chairman, Medical Education Committee, 1994-1995
Chairman, Medical Education Committee, 1995-1997

Regional Contribution:

Member, Medical Advisory Committee to Louisiana Chapter, Arthritis Foundation, 1984-1992
Member, Board of Directors, Louisiana Chapter, Arthritis Foundation, 1986-1992
Vice-President, Board of Directors, Louisiana Chapter, Arthritis Foundation, 1988-1990
President, Board of Directors, Louisiana Chapter, Arthritis Foundation, 1990-1992
Member, Board of Directors, Alabama Chapter Arthritis Foundation, 1992-1997
Member, Medical Advisory Board, Alabama Chapter, Lupus Foundation, 1995-1997
Counselor, 6th Congressional District, Medical Association of the State of Alabama, 2002-present
Member, Board of Directors, Jefferson County Medical Society, 2003-present

National Contribution:

Co-Chairman, Humoral Immunology Concurrent Session, American Rheumatism Association National Meeting, New Orleans, Louisiana, June 4, 1986
Member, Local Arrangements Committee, American Rheumatism Association National Meeting, New Orleans, Louisiana, June 3-7, 1986
Member, Directors of Rheumatology Training Programs. American College of Rheumatology, 1985-present
Member, Public Relations Committee, American College of Rheumatology, 1994-1997
Member, Audiovisual Aids Subcommittee, American College of Rheumatology, 1994-present
Member, Subcommittee on Fellowship Training, American College of Rheumatology, 1994-1998
Chairman, Subcommittee on Fellowship Curriculum Development, American College of Rheumatology, 1994-1998
Pre-reviewer, Residency Review Committee, Accreditation Council of Graduate Medical Education, 1994-1999
Chair, Committee on Rheumatology Training and Workforce Issues. American College of Rheumatology, 1998-2000
Councilor, Association of Subspecialty Professors, 1996-present
Member, Special Emphasis Review Panel, Lupus SCOR grants, NIAMS, NIH, November 1997.
Member, General Internal Medicine Generalist Education Leadership Work Group. HRSA funded Association of Professors in Medicine Project, 1997-present
Member, Accreditation Appeal Committee - Rheumatology. Accreditation Council of Graduate Medical Education, 1998-present
Member, Board of Directors. American College of Rheumatology, 2000-2003.
Secretary-Treasurer, Association of Subspecialty Professors, 2000-2001.
President- Elect, Association of Subspecialty Professors, 2001-2002.
President, Association of Subspecialty Professors, 2002-2003.

Editorial Board:

Southern Medical Journal 1992-present

Teaching Experience:

Teaching in all four years for the medical school, the medicine residency program and the rheumatology fellowship program.

Abstracts/Scientific Presentations:

1. Boulware DW, Nardella FA, Teller DC, Mannik M: A method for the production of the CH2 domain with cyanogen bromide: Its interaction with IgG-rheumatoid factor. Arthritis Rheum 25:S84, 1982. National American Rheumatism Association and Pan American Congress of Rheumatology 1982 meeting in Washington, D.C.
2. Boulware DW, Nardella FA, Mannik M: Cyanogen bromide cleaves human Fc fragments at both methionyl and tryptophanyl residues. Clin Research 31: 846A, 1983. Southern Society for Clinical Investigation - American Federation for Clinical Research 1984 meeting in New Orleans, Louisiana

3. Boulware DW, Nardella FA, Mannik M: Cyanogen bromide cleaves Fc fragments at both methionyl and tryptophanyl residues. Clin Research 32:717A, 1984. Southeastern Regional American Rheumatism Association 1983 meeting in Lake Buena Vista, Florida
4. Hedgpeth MT, Kiratikanont P, Boulware DW: Interstitial pneumonitis in ANA negative systemic lupus erythematosus: A new clinical manifestation and possible association with anti-SS-A antibodies. Southeastern Regional American Rheumatism Association 1986 meeting in White Sulphur Springs, West Virginia
5. Soto-Aguilar MC, Boulware DW: ANA positive glomerulonephritis. Southeastern Regional American Rheumatism Association 1986 meeting in White Sulphur Springs, West Virginia
6. Hedgpeth MT, Boulware DW: Antibodies to SS-A (Ro) and interstitial lung disease in systemic lupus erythematosus. National American Rheumatism Association 1987 meeting in Washington, D.C.
7. Soto-Aguilar MC, Boulware DW: Retroperitoneal mass and low back pain. 1987 Southeastern Regional American Rheumatism Association 1987 meeting in Nashville, Tennessee
8. Leissinger C, Boulware D, Malter J, Avent J, Stuckey WJ: Increased IgG binding to platelets exposed to IgG anticardiolipin antibody is not increased further with platelet stimulation. American Society of Hematology 1988 meeting in San Antonio, Texas
9. Doster DR, Boulware DW, Krane NK: Survival of massive pulmonary hemorrhage in systemic lupus erythematosus. Society of Air Force Physicians 1989 meeting in San Francisco, California
10. Summers PR, Biswas NK, Boulware DW, Smith W, O'Quinn AG: A case report of giant cell arteritis of the uterus and adnexae. American College of Obstetricians and Gynecologists 1989 28th Annual meeting in Washington, D.C.
11. Leissinger C, Boulware DW, Stuckey WJ: In vivo binding of anti-phospholipid antibodies to platelets occurs in SLE without causing thrombocytopenia. American Society of Hematology 1989 meeting
12. Feghali CA, Boulware DW, Levy LS: Regulation of fibroblast function in systemic sclerosis. Southeastern Regional meeting of the American College of Rheumatology April 1991
13. Feghali CA, Boulware DW, Levy LS: Regulation of fibroblast function in systemic sclerosis. American Federation of Clinical Research. Seattle, Washington May 1991
14. Feghali CA, Bost KL, Boulware DW, Levy LS: Overproduction of interleukin-6 by fibroblasts cultured from affected skin sites of scleroderma patients. National American College of Rheumatology meeting, November 1991
15. Feghali CA, Bost KL, Boulware DW, Levy LS: Human recombinant IL-4, but not IL-2 or IL-5, induces proliferation and IL-6 production by human dermal fibroblasts. Southern Regional American Federation for Clinical Research January 1992
16. Feghali CA, Levy LS, Boulware DW, Ferriss JA: Proto-oncogene expression in fibroblasts derived from affected skin of scleroderma patients. Southeastern Regional American College of Rheumatology meeting March 1992
17. Feghali CA, Bost KL, Boulware DW, Levy LS: Induction of IL-6 by IL-4 in dermal fibroblasts: Possible role of IL-4 in scleroderma. Southeastern Regional American College of Rheumatology meeting March 1992
18. Malin JK, Feghali CA, Bost KL, Levy LS, Boulware DW: Correlating serum IL-6 levels with clinical severity in scleroderma patients. Southeastern Regional American College of Rheumatology meeting March 1992

19. Feghali CA, Levy LS, Bost KL, Boulware DW: Control of IL-6 production and response in scleroderma fibroblasts. National American College of Rheumatology meeting October 1992
20. Boulware DW, Edgeton D: Linking the funding of medical education to curriculum reform. AAMC Southern Group on Educational Affairs meeting March 14, 1998.

Invited Lectureships/Clinical Presentations:

1. Essential mixed cryoglobulinemia. VA Medical Center of New Orleans Patient Management Conference. New Orleans, Louisiana - December 16, 1983
2. Methylprednisolone Pulse Therapy in Rheumatoid Arthritis. Baylor Medical Center Rheumatology Conference Dallas, Texas - January 31, 1984
3. Clinical Features of Systemic Lupus Erythematosus, Washington Parish Medical Society Quarterly Meeting, Bogalusa, Louisiana - May 3, 1984
4. Current Concepts in Arthritis. Texas Medical Association Annual Meeting, Fort Worth, Texas - May 10, 1984
5. Experimental Modalities of Treatment in Rheumatoid Arthritis, Ochsner Medical Foundation Grand Rounds, New Orleans, Louisiana - June 19, 1984
6. Current Concepts in the Treatment of Rheumatoid Arthritis, Tangipahoa Parish Medical Society Quarterly Meeting, Hammond, Louisiana - June 19, 1984
7. Current Concepts on the Immunopathogenesis of Rheumatoid Arthritis, The 1984 World's Fair Clinical Immunology CME Seminar, New Orleans, Louisiana - June 21, 1984
8. Update in Rheumatology. New Orleans Internal Medicine Board Review Course, September 15, 1984
9. Treatment of the Refractory Rheumatoid Arthritis Patient. VA Medical Center of New Orleans Patient Management Conference, New Orleans, Louisiana - September 21, 1984
10. Treatment of Rheumatoid Arthritis. East and West Feliciana Parish Medical Society Quarterly Meeting, Jackson, Louisiana - October 2, 1984
11. Use of Non-Steroidal Anti-Inflammatory Agents in Rheumatoid Arthritis. Acadia Parish Medical Society Quarterly Meeting, Crowley, Louisiana - October 9, 1984
12. Management of Common Problems in Arthritis. Southern Medical Association Annual Meeting, New Orleans, Louisiana - November 5, 1984
13. Progressive Systemic Sclerosis. VA Medical Center of New Orleans Patient Management Conference. November 16, 1984
14. Clinical Manifestations of Systemic Lupus Erythematosus. New Orleans General Hospital Quarterly Meeting. New Orleans, Louisiana - December 13, 1984
15. Dermatomyositis and Malignancy. VA Medical Center of New Orleans Patient Management Conference - January 11, 1985
16. Current Concepts on the Treatment of Rheumatoid Arthritis. Iberia Parish Medical Society Quarterly Meeting, New Iberia, Louisiana - January 29, 1985
17. Clinical Application of Circulating Immune Complex Assays in the Rheumatic Diseases. Southeastern Clinical Club Annual Meeting. New Orleans, Louisiana - February 1985
18. Treatment of Rheumatoid Arthritis. Baton Rouge Black Physicians' Association. Baton Rouge, Louisiana - May 19, 1985
19. Management of Progressive Systemic Sclerosis. VA Medical Center of New Orleans. Patient Management Conference, New Orleans, Louisiana - October 11, 1985
20. Psoriatic Arthritis. Psoriasis Symposium at Tulane University Medical Center, New Orleans, Louisiana - October 19, 1985

21. Treatment of Rheumatoid Arthritis. VA Outpatient Clinic of Baton Rouge Clinical Conference. Baton Rouge, Louisiana - October 30, 1986
22. Evaluation of Low Back Pains. VA Outpatient Clinic of Baton Rouge Clinical Conference. Baton Rouge, Louisiana - February 13, 1986
23. Scleroderma and Osler-Weber-Rendu Disease. VA Medical Center of New Orleans Patient Management Conference, May 23, 1986
24. Co-Chairman, Humoral Immunology Concurrent Session. American Rheumatism Association National Meeting, New Orleans, Louisiana - June 4, 1986
25. Experimental Modalities in the Treatment of Refractory Rheumatoid Arthritis, Keesler AFB Medical Center Medicine Grand Rounds. Biloxi, Mississippi - September 11, 1986
26. Treatment of Refractory Rheumatoid Arthritis, Marion County Medical Society Quarterly Meeting. Ocala, Florida - November 18, 1986
27. Clinical Features of Rheumatoid Arthritis, VA Medical Center of New Orleans, Patient Management Conference - February 27, 1987
28. Update in Rheumatology 68th Annual Session of the American College of Physicians, New Orleans, Louisiana - April 4, 1987
29. Update in Rheumatology, New Orleans Internal Medicine Board Review Course - September 12, 1987
30. Update in Rheumatology, New Orleans Internal Medicine Board Review Course - September 10, 1988
31. Non-Steroidal Anti-Inflammatory Drugs in Rheumatology. Jefferson Davis Parish Medical Society. Welch, Louisiana - December 7, 1988
32. Non-Steroidal Anti-Inflammatory Drugs in Rheumatology. County Medical Society Meeting. Little Rock, Arkansas - March 4, 1989
33. Management of the Rheumatic Diseases. Southern Medical Association Regional Meeting. Destin, Florida - March 19, 1989
34. Advances in Rheumatology. County Medical Society Meeting. Nashville, Tennessee. June 29, 1989
35. Update in Rheumatology. Southern Medical Association Regional Meeting, Williamsburg, Virginia August 12, 1989
36. Update in Rheumatology. New Orleans Internal Medicine Board Review Course - September 9, 1989
37. Lupus Pneumonitis. Alabama Rheumatism Society Meeting. Birmingham, Alabama - September 27, 1989
38. Update in Rheumatology, New Orleans Internal Medicine Board Review Course - September 8, 1990
39. Lupus Pneumonitis. Rapides Parish Medical Society Meeting - Alexandria, Louisiana April 18, 1991
40. Chronic Arthritides in Primary Care Medicine. Southern Medical Association Regional Meeting. San Destin, Florida - June 21, 1991
41. Treatment of Rheumatoid Arthritis. Escambia County Medical Society Meeting. Pensacola, Florida - August 6, 1991
42. Update in Rheumatology. New Orleans Internal Medical Board Review Course - September 5, 1991
43. Treatment of Chronic Arthritides. Biloxi County Medical Society Meeting. Biloxi, Mississippi - March 10, 1992

44. The Chronically Ill patient. Southern Medical Association Regional Meeting. Myrtle Beach, South Carolina - April 10, 1992
45. Clinical Evaluation of the Rheumatic Patient. New Orleans Update in Rheumatology. April 30, 1992
46. Update in Rheumatology. New Orleans Internal Medicine Board Review Course - September 12, 1992
47. Scleroderma: Etiology and Pathogenesis. Medicine Grand Rounds. The University of Alabama at Birmingham, Birmingham, Alabama. May 27, 1993
48. Update on Non-Steroidal Anti-inflammatory Drugs. Mississippi Osteopathy Association. San Destin, Florida. June 3, 1993
49. Rheumatology. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. May 19, 1994
50. Future Therapies in Rheumatoid Arthritis. Alabama Chapter American College of Physicians Scientific Meeting. Orange Beach, Alabama. June 3, 1994
51. Course Director and Presenter. Chronic Diseases in Primary Care, Southern Medical Association. Hilton Head, South Carolina. March 24-26, 1995
52. Rheumatology. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. May 19, 1995
53. Course Director. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. May 22-26, 1995
54. Management of Chronic Pain, Southern Medical Association Annual Meeting. Kansas City, Missouri. November 16, 1995
55. Rheumatology. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. May 22, 1996
56. Course Director. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. May 22-26, 1996
57. Curriculum Reform. Harvard Macy Program for Leaders in Medical Education. Boston, Massachusetts. June 1996
58. Curriculum Reform. Harvard Macy Program for Leaders in Medical Education. Boston, Massachusetts. June 1997
59. Funding of Medical Education. Harvard Macy Program for Leaders in Medical Education. Boston Massachusetts. June 1997
60. Course Director. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. June 1997
61. Curriculum Reform. Harvard Macy Program for Leaders in Medical Education. Boston, Massachusetts. June 1998
62. Funding of Medical Education. Harvard Macy Program for Leaders in Medical Education. Boston Massachusetts. June 1998
63. Course Director. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. July 1998
64. Funding of Basic Science Education in Medical Schools. AAMC 1998 Annual Meeting. New Orleans. November 1998.
65. Curriculum Reform. Meharry Medical College. Nashville, Tennessee. March 1999.
66. Course Director. Alabama Internal Medicine Board Review Course. American College of Physicians. Birmingham, Alabama. June 1999
67. Curriculum Reform. Harvard Macy Program for Leaders in Medical Education. Boston, Massachusetts. June 1999

68. Funding of Medical Education. Harvard Macy Program for Leaders in Medical Education. Boston Massachusetts. June 1999
69. Teachers of Generalists: Residents, Subspecialists, and Non-Physicians. General Internal Medicine Faculty Development Project. HRSA Sponsored Association of Professors of Medicine Program. San Diego, California. December 1999
70. Subspecialty Issues for the Integration of Geriatrics: Education. Association of Subspecialty Professors Leadership Conference. Los Cabos, Mexico. March 2000
71. Curriculum Reform. Harvard Macy Program for Leaders in Medical Education. Boston, Massachusetts. June 2000
72. Funding of Medical Education. Harvard Macy Program for Leaders in Medical Education. Boston Massachusetts. June 2000
73. Funding Fellowship Positions: What Mechanisms Exist? Association of Subspecialty Professors Annual Meeting. Washington, DC. October 2000
74. Funding of Medical Education. Harvard Macy Program for Leaders in Medical Education. Boston Massachusetts. June 2001

Publications:

1. Boulware DW: Treatment of rheumatoid arthritis. JAMA 249:1268-1269, 1983
2. Boulware DW: Hypothalamic hypopituitarism presenting with musculo-skeletal complaints. Orthopaedic Review. 14:226-228, 1985
3. Boulware DW, Weissman DN, Doll NJ: The pulmonary manifestations of the rheumatic diseases. Clin Rev Allergy 3:249-267, 1985
4. Boulware DW, Nardella FA, Mannik M: Cyanogen bromide cleaves pooled human Fc fragments at methionyl and tryptophanyl residues. Molecular Immunology 22:1317-1322, 1985
5. Boulware DW: Tuberculous podagra, J Rheum 12:1022-1024, 1985
6. Insler MS, Boutros G, Boulware DW: Corneal ulceration following cataract surgery in patients with rheumatoid arthritis. Am Intra-ocular Implant Soc J 11:594-597, 1985
7. Hedgpeth MT, Boulware DW: Interstitial pneumonitis in antinuclear antibody-negative systemic lupus erythematosus: A new clinical manifestation and possible association with anti-SS-A (Ro) antibodies. Arthritis Rheum 31:545-548, 1988
8. Hedgpeth MT, Boulware DW: Pulmonary hypertension in primary Sjögren's syndrome. Ann Rheum Dis 47:251-253, 1988
9. Soto-Aguilar MC, Boulware DW: Sarcoidosis presenting as antinuclear antibody positive glomerulonephritis. Ann Rheum Dis 47:337-339, 1988
10. Boulware DW, Hedgpeth MT, Collins KR: Arthritis in the elderly. Senior Patient 1:124-127, 1989
11. Boulware DW, Hedgpeth MT: Lupus pneumonitis and antibodies to SS-A (Ro). J Rheumatol 16:479-481, 1989
12. Boulware D., Kushner I. Rheumatologic tests: What to expect. Patient Care 23:164, 1989
13. Insler MS, Boulware DW: The eye and discoid lupus erythematosus. The Eye in Systemic Disease, J.B. Lippincott Co, Philadelphia, 1990
14. Boulware DW, Schmid LD, Baron MK. The fibromyalgia syndrome: Could you recognize and treat it? Postgraduate Medicine 87:211-222, 1990

15. Boulware DW, Volkman T. Cyclical etidronate treatment of osteoporosis. *N Engl J Med* 323:1633, 1990
16. Critchlow M, Boulware DW. Auto immune diseases in the elderly. *Senior Patient*. 2:35-39, 1990
17. Boulware DW, Makkena R. Monthly cyclophosphamide in lupus pneumonitis and myositis. *J. Rheumatol.* 18:153, 1991.
18. Summers P, Biswas M, Boulware DW, et al. Giant cell arteritis of the uterus and adnexae. *Am J Obstet Gynecol* 164:540-542, 1991
19. Trujillo PE, Boulware DW: Interstitial lung disease in collagen vascular diseases. *Immunol All Clin N Am* 12:451-460, 1992
20. Hartzog C, Boulware DW: The painful hip. *Primary Care Rheumatology* 12:1-7, 1992
21. Feghali CA, Bost KL, Boulware DW, Levy LS: Human recombinant IL-4 induces proliferation and IL-6 production by cultured human skin fibroblasts. *Clin Immunol Immunopathol* 63:182-187, 1992
22. Feghali CA, Bost KL, Boulware DW, Levy LS: Mechanisms of pathogenesis in scleroderma. I. Overproduction of interleukin-6 by fibroblasts cultured from affected skin sites of scleroderma patients. *J Rheum* 19:1207-1211, 1992
23. Feghali CA, Boulware DW, Levy LS: Mechanisms of pathogenesis in scleroderma. II. Effects of serum and conditioned medium on fibroblast function in systemic sclerosis. *J Rheum* 19:1212-1219, 1992
24. Byrd SL, Case BK, Boulware DW: Pulmonary manifestations of the rheumatic diseases. *Postgraduate Medicine* 93:149-166, 1993
25. Boulware DW: Optimizing exercise programs for arthritis patients. *The Physician and Sports Medicine* 23:104-120, 1993
26. Feghali CA, Boulware DW, Ferris JA, Levy LS: Expression of c-myc, c-myb, and c-sis in fibroblasts from affected and unaffected skin of patients with systemic sclerosis. *Autoimmunity* 16:167-172, 1993
27. Sorin S, Weiss S, Boulware DW: The patient with rheumatologic disease. In Herr RD, Cydulka RK (eds): *Emergency Care of the Compromised Patient*. JB Lippincott Co., Philadelphia, 1994
28. Feghali CA, Bost KL, Boulware DW, Levy LS: Control of IL-6 expression and response in fibroblasts from patients with systemic sclerosis. *Autoimmunity* 17:309-318, 1994
29. Gay S, Boulware DW, Gay R: Oncogenes, growth factors and matrix in the pathogenesis of scleroderma. *Clin Dermatol* 12:419-424, 1994
30. Boulware DW: The painful shoulder. In Bennett JC, Plum F (eds): *Cecil Textbook of Medicine*, 20th Edition. Philadelphia, Saunders Company, 1996
31. Berner ES, Boulware DW: Medical informatics for medical students: Not just because it's there. *Medical Education Online* 1:3, 1996.
32. Boulware DW: Mechanical disorders of the knee. In: *Arthritis and Allied Conditions*, 13th Edition, Baltimore, Williams and Wilkins, 1996
33. Lue C, Boulware DW, Sanders PW, Omura EF, Ball EV: Calciphylaxis mimicking skin lesions of connective tissue diseases. *Southern Med J* 89:1099-1100, 1996.
34. Bowen JL, Alguire P, Tran LK, et. al.: Meeting the challenges of teaching in ambulatory settings: A national, collaborative approach for internal medicine. *Am J Med* 107:193-197, 1999.
35. Boulware DW: The painful shoulder. In Bennett JC, Plum F (eds): *Cecil Textbook of Medicine*, 21st Edition. Philadelphia, Saunders Company, 2000.

36. Boulware DW: Mechanical disorders of the knee. In: Arthritis and Allied Conditions, 14th Edition, Baltimore, Williams and Wilkins, 2001.
37. Boulware DW: Bursitis, tendinitis, and other peri-articular diseases. In: Goldman E, Ausiello D (eds): Cecil Textbook of Medicine, 22nd Edition. Philadelphia, Saunders Company, in press.
38. Boulware DW: The subspecialty fellowship training program director. Essentials and expectations. Am J Med 112:686-688, 2002.
39. Boulware DW: The painful shoulder. In: Koopman WJ, Boulware DW, Heudebert GR (eds): Clinical Primer of Rheumatology. Baltimore, Lippincott, Williams and Wilkins, 2003.
40. Boulware DW: Mechanical disorders of the knee. In: Koopman WJ, Boulware DW, Heudebert GR (eds): Clinical Primer of Rheumatology. Baltimore, Lippincott, Williams and Wilkins, 2003.
41. Boulware DW, Arnett FC, Cush JJ, et. al.: The seronegative spondyloarthropathies. In: Koopman WJ, Boulware DW, Heudebert GR (eds): Clinical Primer of Rheumatology. Baltimore, Lippincott, Williams and Wilkins, 2003.
42. Boulware DW, Becker MA, Edwards NL: Gout and crystal-induced synovitis. In: Koopman WJ, Boulware DW, Heudebert GR (eds): Clinical Primer of Rheumatology. Baltimore, Lippincott, Williams and Wilkins, 2003.

**APPEARS THIS WAY
ON ORIGINAL**